



**DS-9500NI-S Series NVR
USER MANUAL
Version 1.2.0**

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Preventive and Cautionary Tips

Before connecting and operating your NVR, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the NVR.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the NVR in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.

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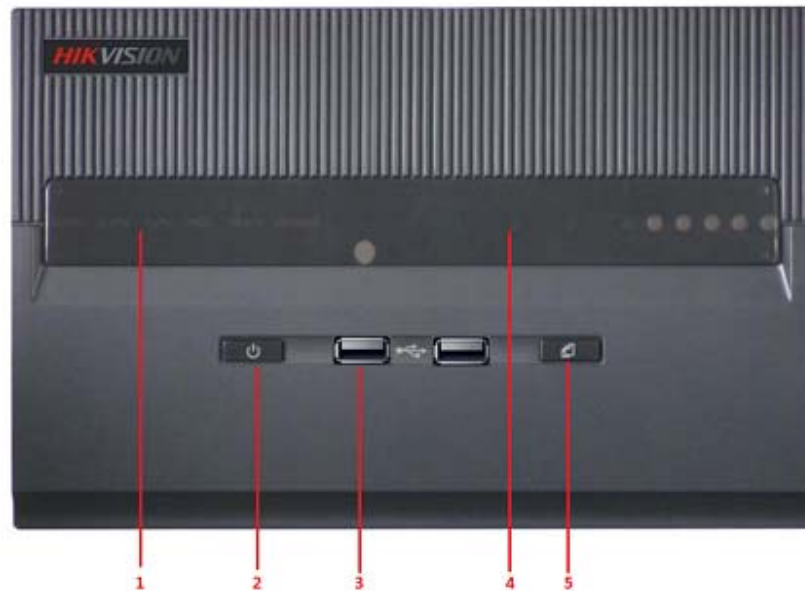
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C H A P T E R 1

Introduction

1.1 Front Panel Introduction

DS-9504NI-S Front Panel:



No.	Name		Description
1	Status LED Indicators	Power	Turning red indicates power supply but without system running, turning blue indicates power supply and system running.
		Alarm	Alarm indicator turns red when a sensor alarm is detected.
		TX/RX	TX/RX indicator blinks blue when network connection is functioning properly.
		HDD	HDD indicator blinks red when data is being read from or written to HDD.
		Ready	Ready indicator turns blue when NVR is functioning properly.
		Backup	Backup indicator blinks blue when data is being backup.
2	Power Button		Powers NVR on/off.
3	USB Ports		Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
4	Channel Status Indicators		Blue indicates recording, red indicates network connection, purple indicates recording & network connection.
5	Backup Button		Backup video files. Press this button, NVR will backup all IP cameras' 24-hour recorded video into USB flash memory.

DS-9508NI-S Front Panel:



No.	Name		Description
1	Status LED Indicators	Power	Turning red indicates power supply but without system running, turning blue indicates power supply and system running.
		Alarm	Alarm indicator turns red when a sensor alarm is detected.
		TX/RX	TX/RX indicator blinks blue when network connection is functioning properly.
		HDD	HDD indicator blinks red when data is being read from or written to HDD.
		Ready	Ready indicator turns blue when NVR is functioning properly.
		Backup	Backup indicator blinks blue when data is being backup.
2	USB Ports		Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
3	Power Button		Powers NVR on/off.
4	Backup Button		Backup video files. Press this button, NVR will backup all IP cameras' 24-hour recorded video into USB flash memory.
5	Channel Status Indicators		Blue indicates recording, red indicates network connection, purple indicates recording & network connection.

DS-9516NI-S Front Panel:



No.	Name		Description
1	Status LED Indicators	Power	Turning red indicates power supply but without system running, turning blue indicates power supply and system running.
		Alarm	Alarm indicator turns red when a sensor alarm is detected.
		TX/RX	TX/RX indicator blinks blue when network connection is functioning properly.
		HDD	HDD indicator blinks red when data is being read from or written to HDD.
		Ready	Ready indicator turns blue when NVR is functioning properly.
		Backup	Backup indicator blinks blue when data is being backup.
2	Backup Button		Backup video files. Press this button, NVR will backup all IP cameras' 24-hour recorded video into USB flash memory.
3	USB Ports		Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
4	Power Button		Powers NVR on/off.
5	Channel Status Indicators		Blue indicates recording, red indicates network connection, purple indicates recording & network connection.

1.2 Starting and Shutting Down Your NVR

Power On

If the power LED indicator on the front panel is off, please plug the power supply into an electrical outlet, the LED should turn red, indicating the unit is receiving power.

When the LED is red, please press the Power button on the front panel. The Power indicator will turn blue. The unit will begin to start.

Note: DS-9500NI-S series NVR do not have local output, when Ready indicator turns blue, that means the unit is power on and ready to be configured.

Power Off

Standard Shutdown

Press and hold the POWER button for 3 seconds; the device will enter power off process, when power indicator turns red, turn off the power switch on the back panel.

Other Methods of Shutdown

Shutdown with Power Switch

Please try to avoid shutting down the unit by turn off the power switch on the back panel (especially during recording).

Shutdown by Unplug Power Supply

Please try to avoid shutting down the unit by unplug power supply (especially during recording).

Note: It is highly recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the unit.

C H A P T E R 2

Network Parameters Configuration

DS-9500NI-S Series NVR are mainly for IPC, DVS network video storage and playback. Network configurations are needed before operating, including: IP address, subnet mask, gateway and port.

Note: The factory default username is admin, password is 12345.

The factory default IP address of DS-9500NI-S series is 192.168.0.1.

2.1 Hyper Terminal Setup

The common method is to connect NVR and PC with serial line, run Hyper Terminal and modify parameters with serial command. Please connect the RS-232 port of NVR with the COM port of PC directly, power on the NVR and PC and follow the steps:

Step 1: Enter Hyper Terminal.

Click “Start”-> “Programs” -> “Accessories” -> “Communications” -> “Hyper Terminal” in Windows system, and the dialogue box below will appears as Figure 2.1.1.



Figure 2.1.1

Step 2: Name the connection and define the icon.

Input a name (e.g. HK), select an icon, and press “OK” to enter “Connect To” dialogue box.

Step 3: Select the communication port.

Select “COM1” in “Connect To” inter face (Please select the COM port according to the reality, in case PC has more than 1 COM.) Press “OK” to enter “Properties” dialogue box.

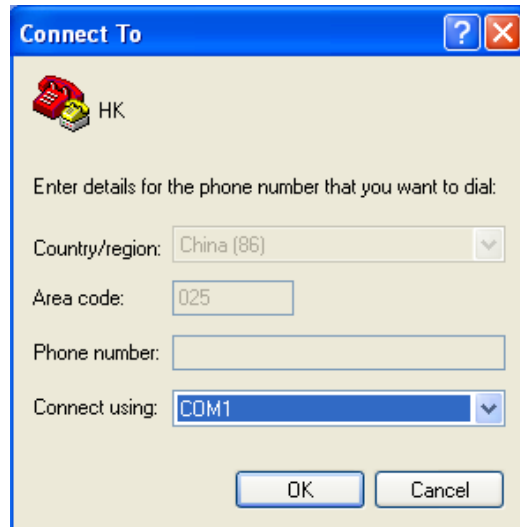


Figure 2.1.2

Step 4: Serial port setup.

Set port parameters in “COM1 Properties” dialogue box as follow: (Fig 2.1.3)

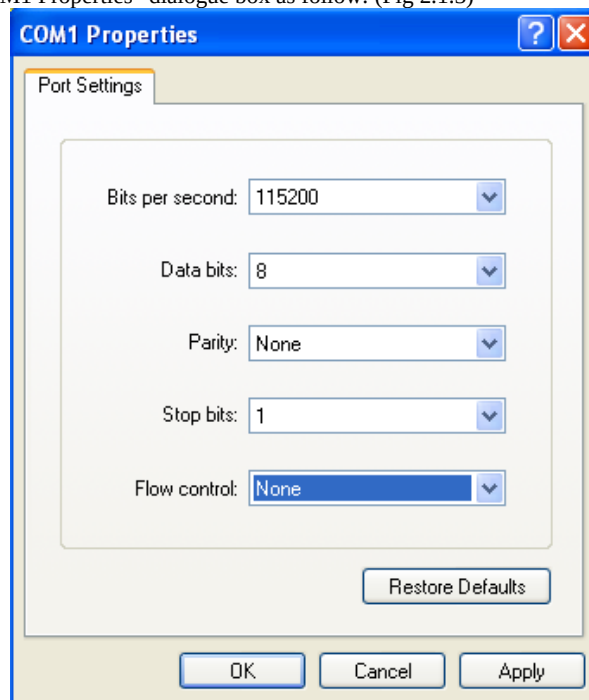


Figure 2.1.3

The parameters should be:

Bits per second: 115200

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Press “Apply” and “OK” after the setup. Press “Enter” under Hyper Terminal interface. When “[root@dvrdivs/]#” appears, the connection is established.

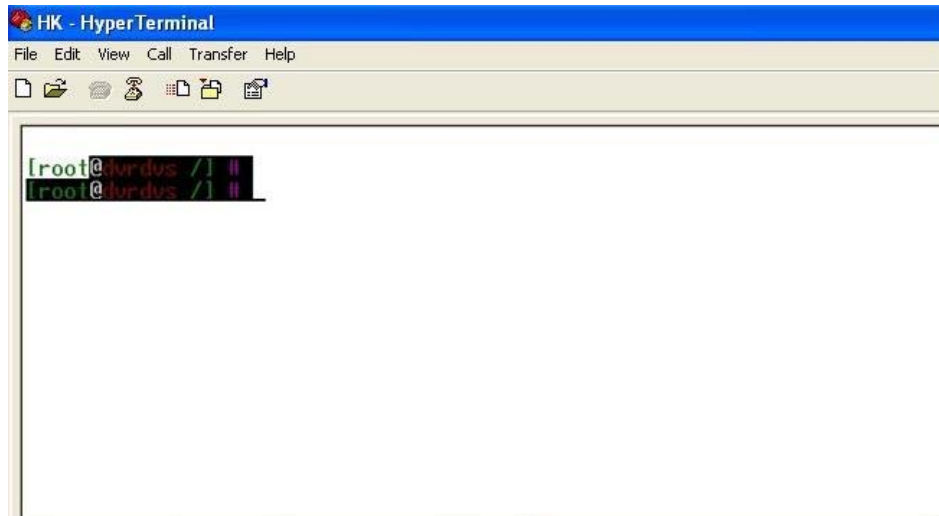
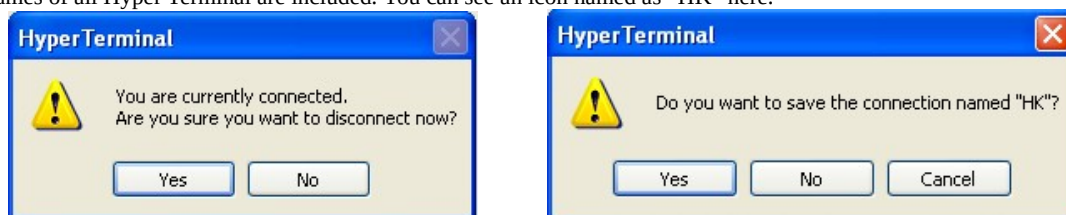


Figure 2.1.4

Step5: Disconnect and save connection.

According to the tips, disconnect and save “HK” for the next time. After saving, there will be a new “Hyper Terminal” item established in the program group “Start”-> “Accessories”->“Communications”->“Hyper Terminal”. “Connection” names of all Hyper Terminal are included. You can see an icon named as “HK” here.



2.2 Network Configuration by Hyper Terminal

Enter Hyper Terminal

Click “Start”->“Programs”->“Accessories”->“Communications”->“Hyper Terminal”->“HK”, then the Hyper Terminal interface will appear as figure below. Type “Enter”, and the prompt “[root@dvrdivs/]#” will appear which means connection between RS232 interface of PC and RS232 interface of NVR is established successfully by Hyper Terminal. The following operation commands are to accomplish the parameters setup in the prompt.

```

HK - HyperTerminal
File Edit View Call Transfer Help

[root@lvrdivs /] #
[root@lvrdivs /] # helpm
Commands Usage

helpm      :      Printf the command usage list
getIp      :      Get the device's IP address
setIp      :      Set the device's IP address
                  Usage: setIp [IP ADDRESS]:[SUBNET MASK]
                  e.g. setIp 192.168.1.10:255.255.255.0
getPort    :      Get the device's command PORT
setPort    :      Set the device's command PORT
                  Usage: setPort [PORT NUMBER]
                  e.g. setPort 8000
getGateway :      Get the device's gateway
setGateway :      Set the device's gateway
                  Usage: setGateway [GATEWAY ADDRESS]
                  e.g. setGateway 192.168.1.1

[root@lvrdivs /] #

Connected 0:00:4 ANSI  115200 8-N-1  SCROLL  CAPS  Capture  Print echo

```

Figure 2.2.1

Commands	Utilities
helpm	Console help command is used to print common commands, show as Figure 2.2.1.
getIp	Show the current IP address of NVR. Command format: getIp "Enter".
setIp	Setup NVR IP address. Command format: setIp IP: mask e.g. setIp 192..168.1.11:255.255.255.0
getPort	Show the current port of NVR. Command format: getPort "Enter".
setPort	Setup NVR port. Command format: setPort Port e.g. setPort 9000
getGateway	Show current NVR gateway address. Command format: getGateway "Enter".
setGateway	Setup NVR gateway. Command format: setGateway Gateway e.g. setGateway 192.168.1.1

C H A P T E R 3

ActiveX Control Installation

DS-9500NI-S series NVR can be accessed and configured by web server. Open IE browser, input the IP address of DS-9500NI-S and then click Enter. The system will remind you to install the ActiveX control. After the installation, you can configure and manage the NVR remotely.

The ActiveX control has English and Chinese to selections. It can be used under 1024*768, 1152*864, 1280*1024 display resolutions.

Note: Please use IE 6.0 or IE 7.0 as browser, and upgrade OS to the latest version.

C H A P T E R 4

User Login and Exit

Open IE browser, input the IP address of NVR, the web server will select the language automatically according to the system language and maximize the IE browser.

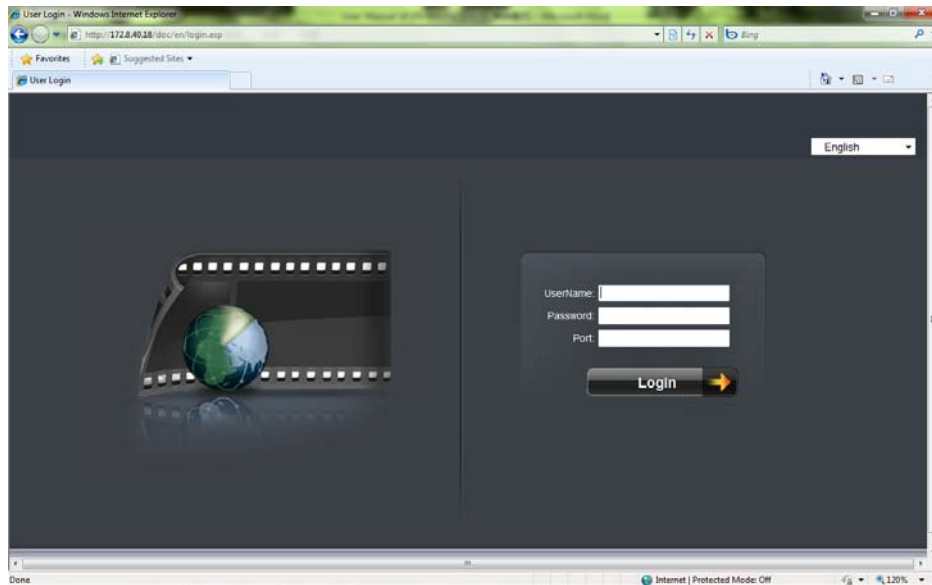


Figure 4.1

On the top right corner, language is selectable between Chinese and English.

Input the correct user name, password and port, click “Login” to enter preview interface, or it will pop up an error box. The default user name is admin, password is 12345, and port is 8000.

After login, click “Exit” to log off and return to the login interface.

C H A P T E R 5

Preview

After login, the preview interface will display:



Figure 5.1

Interface description:

Area	Description	Area	Description
1	Channel list	2	Live view
3	PTZ	4	Video adjustment
5	Play control		

Play control buttons description:

Button	Description	Button	Description
	1 window division		4 windows division
	9 windows division		16 windows division
	Stop all preview		Capture image
	Start all recording		Stop all recording
	Previous page		Next page
	Open/ Close audio		

5.1 Preview

5.1.1 Windows Division

When live preview, the windows division can be selected by click the button on play control area. It can support 1, 4, 9 and 16 windows division. The change between different windows division modes will not stop the current preview; the window still can be operated.

5.1.2 Preview

Preview by channel:

After choosing window division mode, select one window, and click  on channel list to preview the current channel. If preview successful, the icon will become .



Preview by page:

Click the device node on the list, then multiple channels will start to display synchronously according to the selected window divisions. Click  to switch to the next page, click  to the previous page.

Or just click  and  to start preview by page.

Double click to maximize:

Click the selected window can maximize the window to full screen, double click again to resume.

Full screen display:

Click  to change the multi-channel preview to full screen, click  to resume.



When previewing, select the channel, and click  to open audio, the status will be . Then click  to open audio scroll bar and adjust the audio. After the adjustment, the bar will disappear automatically.

When audio is open, click  to close audio and the status will resume to .

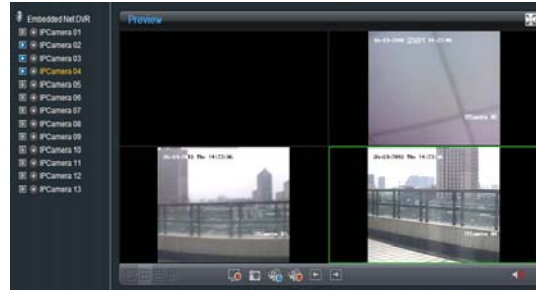


Note: When preview with web server, only one channel audio can be previewed at one time.

5.1.4 Stop Preview

Click  on the playlist, it will become . This can stop the channel preview.

Click  to stop all channels preview.



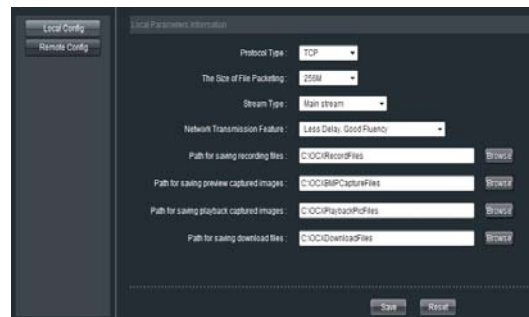
5.2 Recording and Capturing Image

The previewing channel is required when recording and capturing image.

Note: When stop previewing, will also stop the recording of this channel.

5.2.1 Recording

Click “Config”, enter local configuration menu where can change the directory of saving recording file and the size of file packing.

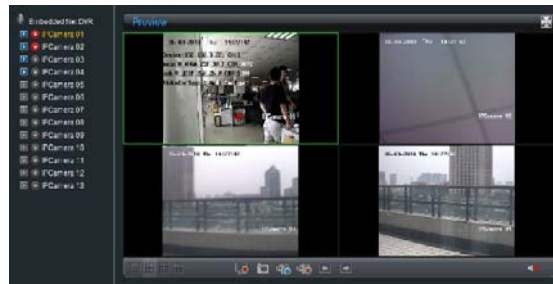


Click  button on playlist to start recording of this channel, if the icon is not , it will note “Recording failed”.

Click  icon again to stop recording, and the saving file folder will pop up automatically.

When multiple channels are under previewing, user may click  to start all channel recording, or click  to stop all channel recording.

Stop previewing will also stop recording of this channel.



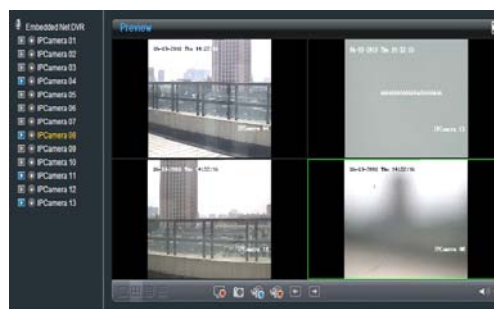
Note: If saving file disk space is less than 500M, the web server will stop recording automatically.

5.2.2 Capturing Image

Click “Config” to enter local configuration menu, where can modify the saving capturing image directory.



Select a previewing window, click  to capture image. If capture image successfully, the saving folder will pop up automatically.



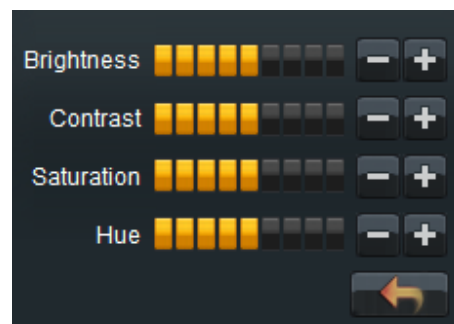
Note: When disk space is less than 500M, capture image will be failed.

5.3 Video Parameters Setting

Select the previewing channel, and adjust the brightness, contrast, saturation and Hue for it.

Click  to increase and click  to decrease. Click  or  can also adjust the value.

Click  icon to resume the default values.



C H A P T E R 6

PTZ Control

If the front-end connects with PTZ, PTZ control is available when preview.

With the direction buttons, it can achieve 8 directions control. Also zoom, focus, iris, light and wiper are adjustable.

Click  to enable auto scan, click again to stop it.

If preset point is set, the point can be called by selecting in the draw down list and clicking .



C H A P T E R 7

Playback

Click “Playback” to enter playback menu.

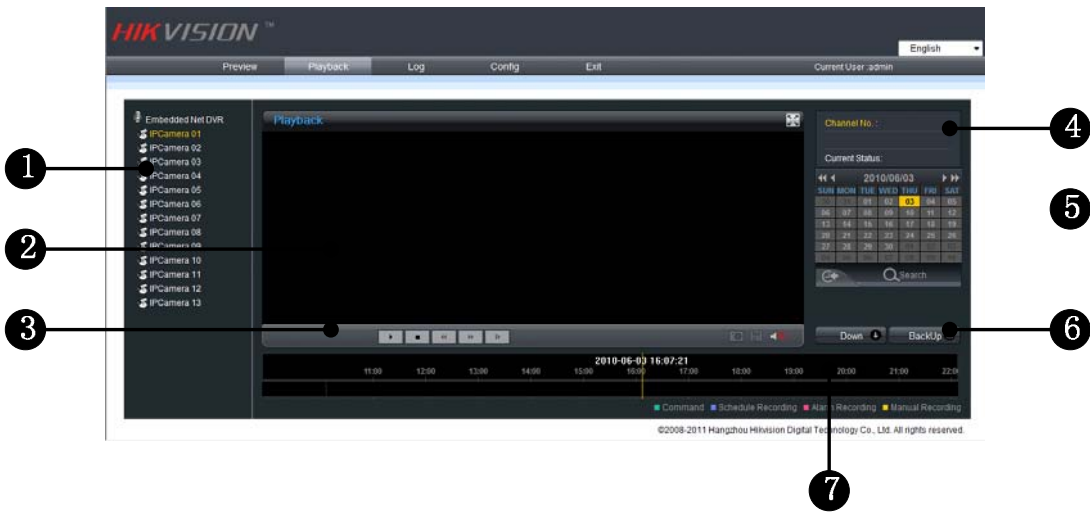


Figure 7.1

Playback interface description:

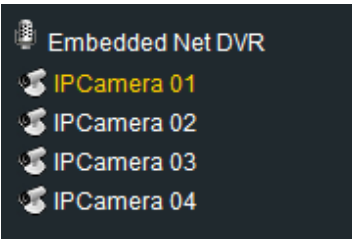
Area	Description	Area	Description
1	Channel list	2	Playback video
3	Playback control	4	Playback status
5	Calendar	6	Download/ Backup
7	Timeline		

Playback control buttons description:

Button	Description	Button	Description
▶	Play	■	Stop
◀◀	Slow down	▶▶	Speed up
▶▶	Play by single frame	📷	Snapshot
📺	Video clip	🔊	Open/Close audio

7.1 Playback Query

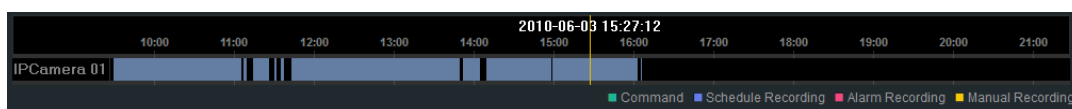
Step 1:
Select a channel on the channel list. (Channel 1 is the default.)



Step 2:
Select a date in calendar.



Step 3:
Click “Search” to search the matched recorded files. If there are search results, then they will be shown in the time line area.



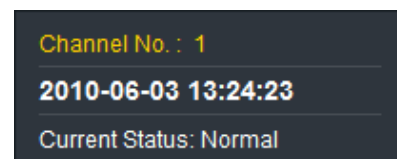
Drag the timeline to select the specific time. Different file types will be indicated with different colors.

7.2 Play Recording File

After searching file, click  to play.



When playback, the playback status will indicate the channel number, time and status.



Recording file location:

Click , input the time in the pop-up box and click “Go”. This will start the file playback from the specified time.

Drag timeline, and set “” to the specified time to play back the video.



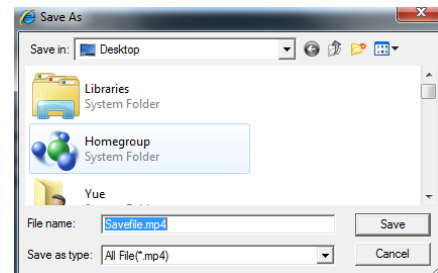
7.3 Capturing Image and Download

Click “Config” to enter local configuration menu, where can change saving directory of captured image and recorded file.



When playback, click  to capture image. If capturing image successfully, the saving image folder will pop up automatically.

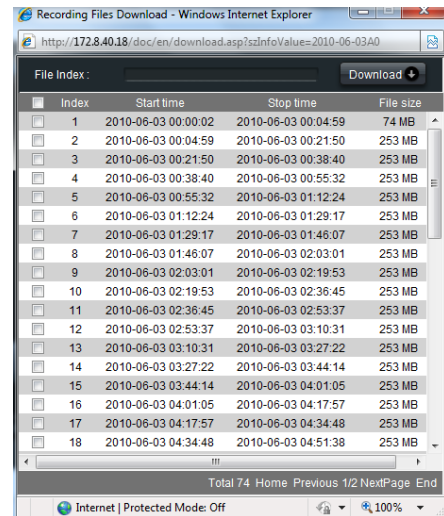
When playback, click  to pop up saving file window. After the selection, the status will become , click again to stop saving.



After searching file, click **Down** to pop up a new page where list all the files for the specific day.

Select one file and click **Download** to start download, click again to stop download.

During download, the window will display the file number and download progress.



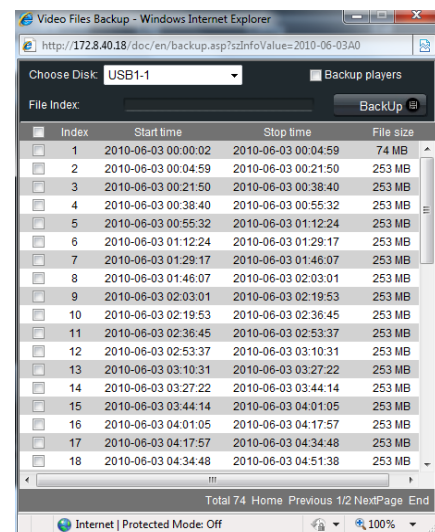
7.4 Remote Backup

DS-9500NI-S series NVR support local one key backup function, and it can also support backup to USB storage devices remotely.

After searching files, click **BackUp** to pop up a new page where list all the files for the specific day.

Select the backup device, enable backup player or not, select the files and click **BackUp** to start backup, click again to stop backup.

During backup, the window will display the file number and backup progress.



Note: If USB device cannot be detected, please try to connect again. If it still cannot be detected, this may be because of the compatible problem between NVR and backup device.

C H A P T E R 8

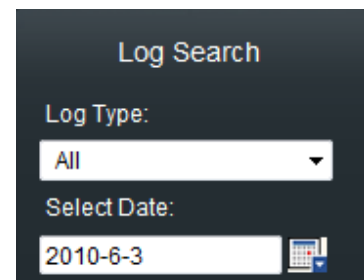
Log Search

Click “Log” to enter log query menu:



Figure 8.1

Select the log type and date, and click  to list all matched logs.



Enable “Start” as ☒ to search the log file in a certain period of a day.



Click  can export the logs as Excel or TXT file.

Note: Up to 2000 logs can be listed; if the items are more than 2000, please choose a certain period and search again.

C H A P T E R 9

Configuration

Click “Config” button in the menu bar and enter parameters setup menu, which displays local configuration by default.

9.1 Local Configuration

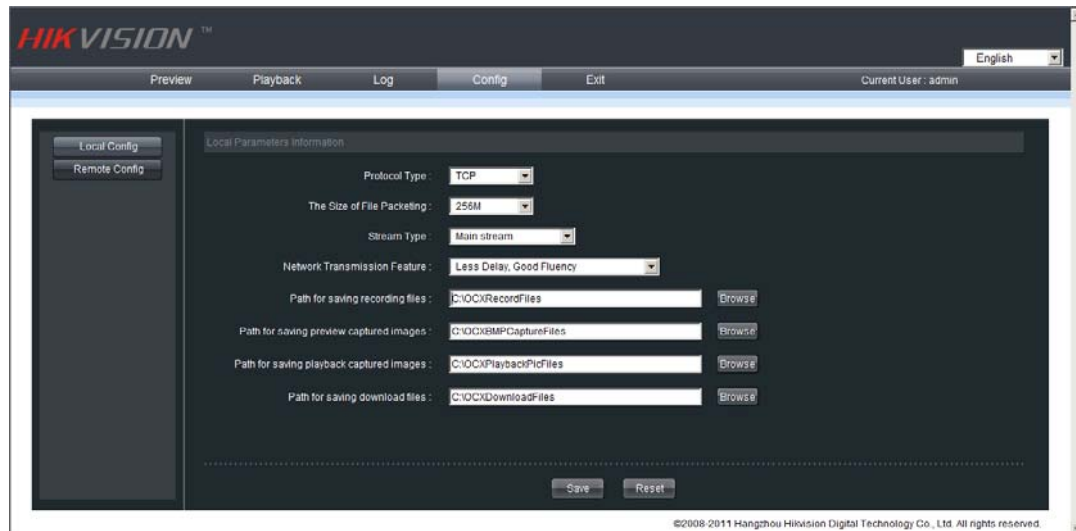


Figure 9.1

Local Parameters Information:

Local Configurations	Parameters	Descriptions
	Protocol Type	Select network transmission protocol: TCP or UDP.
	The Size of File Packaging	Set the size of recordings
	Stream Type	Main Stream for recording. Substream for viewing live images.
	Network Transmission Feature	Set real-time and fluency of network feature
	Path for saving recording files	Select a folder to save the recordings
	Path for saving preview captured images	Select a folder to save the pictures captured while preview
	Path for saving playback captured images	Select a folder to save the pictures captured while playback
	Path for saving download files	Select a folder to save downloaded recordings

9.2 IP Camera Configuration

Click “Remote Config” and enter IP camera configuration menu.

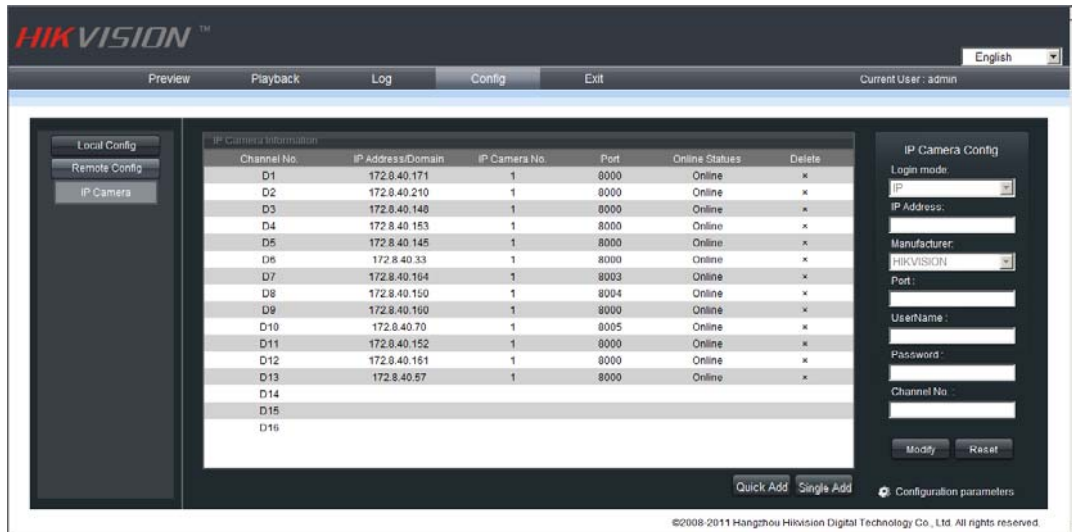


Figure 9.2

Model Name	IP camera connections
DS-9504NI-S	Up to 4-ch D1 or 2-ch 720P or 1-ch UXGA IP cameras
DS-9508NI-S	Up to 8-ch D1 or 4-ch 720P or 2-ch UXGA IP cameras
DS-9516NI-S	Up to 16-ch D1 or 8-ch 720P or 4-ch UXGA IP cameras

Note: For DS-2CD852MF series IP camera at UXGA resolution, up to 1 channel can be connected to DS-9504NI-S model, 2 channels to DS-9508NI-S model and 4 channels to DS-9516NI-S model.

9.2.1 Quick Add of IP camera

DS-9500NI-S series NVR provides a function of remote auto searching IP camera. When there are supported IP cameras in the same network segment of a LAN with NVR, you may add it in one button with default user name, password and port number.

Note: Before applying Quick Add function, please make sure that IP camera is compatible with NVR and default user name, password, port number are not changed.

Click **Quick Add**, the on-line IP cameras will be listed as figure below shown:

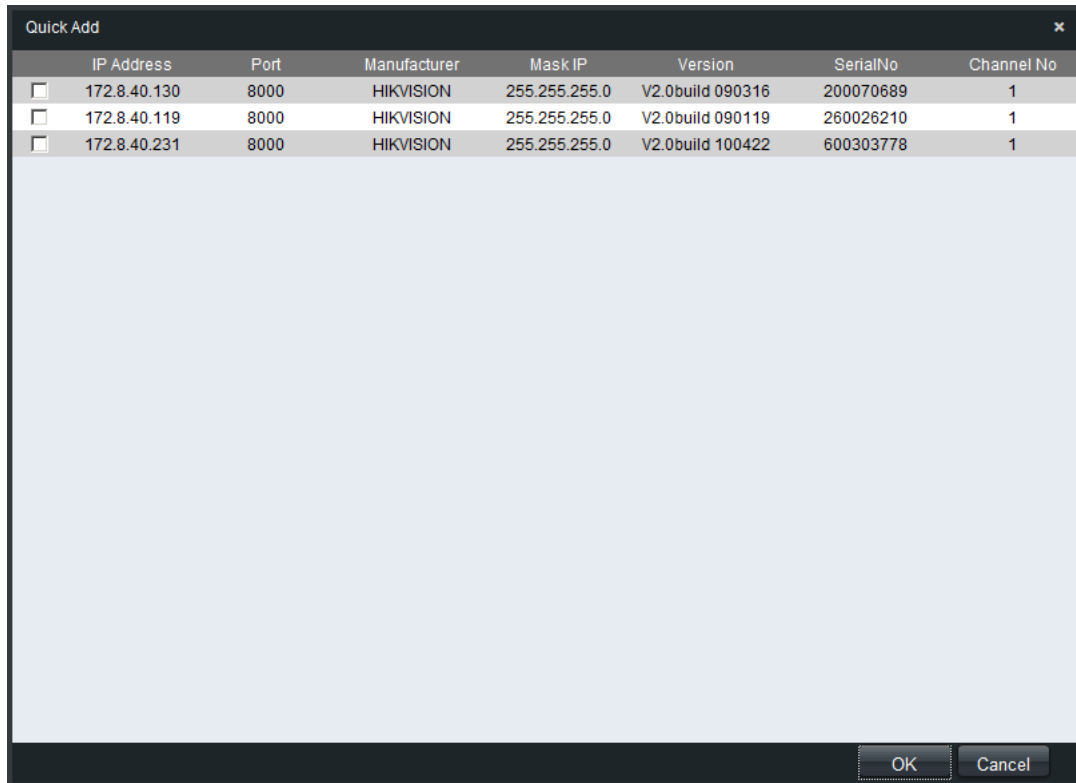


Figure 9.3

Tick a box in front of the listed camera and click OK to finish.

9.2.2 Single Add of IP camera

This function enables you to add a single IP camera quickly. When there are supported IP cameras in the same network segment of a LAN with NVR, you may add it in one button with default user name, password and port number.

Note: Before applying Single Add function, please make sure that IP camera is compatible with NVR and default user name, password, port number are not changed.

First, select a Channel No. then click **Single Add** and the on-line IP cameras will be listed as figure below shown:

Online IPC							
	IP Address	Port	Manufacturer	Mask IP	Version	Serial No	Channel No
1	172.8.40.70	8005	HIKVISION	255.255.255.0	V2.0build 090522	260026182	1
2	172.8.40.119	8000	HIKVISION	255.255.255.0	V2.0build 090119	260026210	1
3	172.8.40.150	8004	HIKVISION	255.255.255.0	V2.0build 090522	260026235	1
4	172.8.40.161	8000	HIKVISION	255.255.255.0	V2.0build 090522	260026251	1
5	172.8.40.152	8000	HIKVISION	255.255.255.0	V2.0build 090522	260026225	1
6	172.8.40.171	8000	HIKVISION	255.255.255.0	V2.0build 100520	400613419	1
7	172.8.40.130	8000	HIKVISION	255.255.255.0	V2.0build 090316	200070689	1

Figure 9.4

Select one camera in the list and click **Select** to finish.

Then you can change IP address, sub mask or user name, password in the menu on the right, and click “Modify” to confirm.

Manually Add IP camera

First select a Channel No. to enable IP camera Config menu shown on the right.

Input the IP address, port, user name and password, click “Modify” to finish adding an IP camera that will be listed in the IP Camera Information area.

Clicking Reset button will restore the configurations of IPC back to the previous ones.

Clicking **X** button will delete the selected IP camera.

IP Camera Information					
Channel No.	IP Address/Domain	IP Camera No.	Port	Online Statues	Delete
D1	172.8.44.230	1	8000	Online	x
D2	172.8.40.171	1	8000	Online	x
D3	172.8.40.150	1	8004	Online	x
D4	172.8.40.70	1	8005	Online	x
D5	172.8.40.164	1	8003	Online	x
D6	172.8.40.152	1	8000	Online	x
D7	172.8.40.145	1	8000	Online	x
D8	172.8.40.148	1	8000	Online	x
D9	172.8.44.201	1	8000	Online	x
D10	172.8.44.203	1	8000	Online	x
D11	172.8.44.210	1	8000	Online	x
D12	172.8.40.153	1	8000	Online	x
D13	172.8.40.163	1	8000	Online	x
D14	172.8.40.119	1	8000	Online	x
D15	172.8.40.161	1	8000	Online	x
D16	172.8.40.162	1	8000	Online	x

IP Camera Config

Login mode:

IP

IP Address:

172.8.40.130

Manufacturer:

HIKVISION

Port:

8000

UserName:

admin

Password:

Channel No.:

1

Modify

Reset

9.3 Recording Settings

Click “Remote Config” and select **Configuration parameters** to enter remote settings menu where you can configure recording, alarm, network settings and etc.

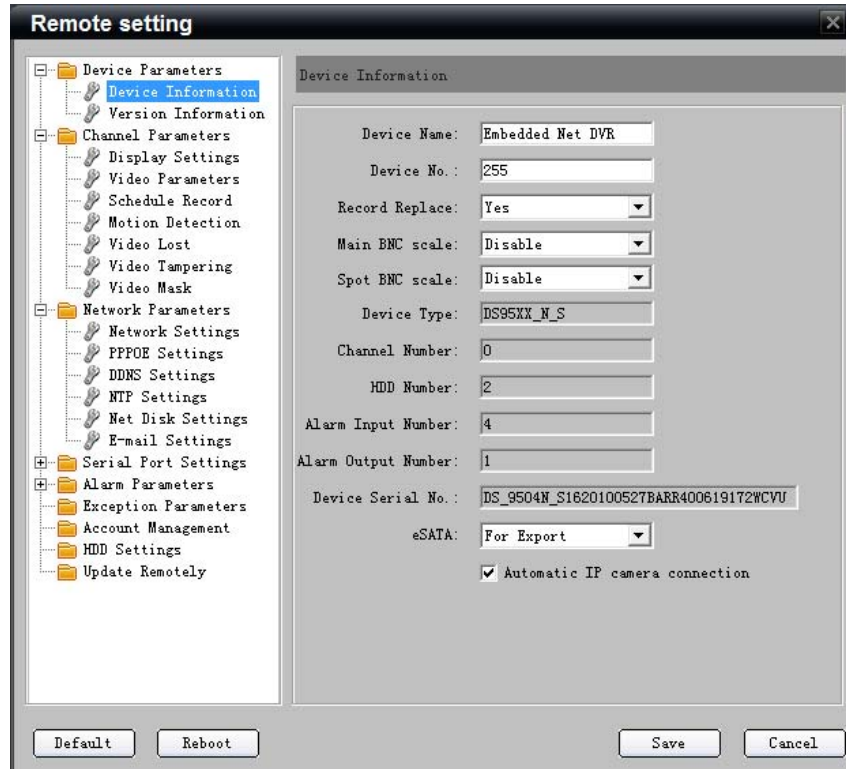


Figure 9.5

9.3.1 Video Parameters

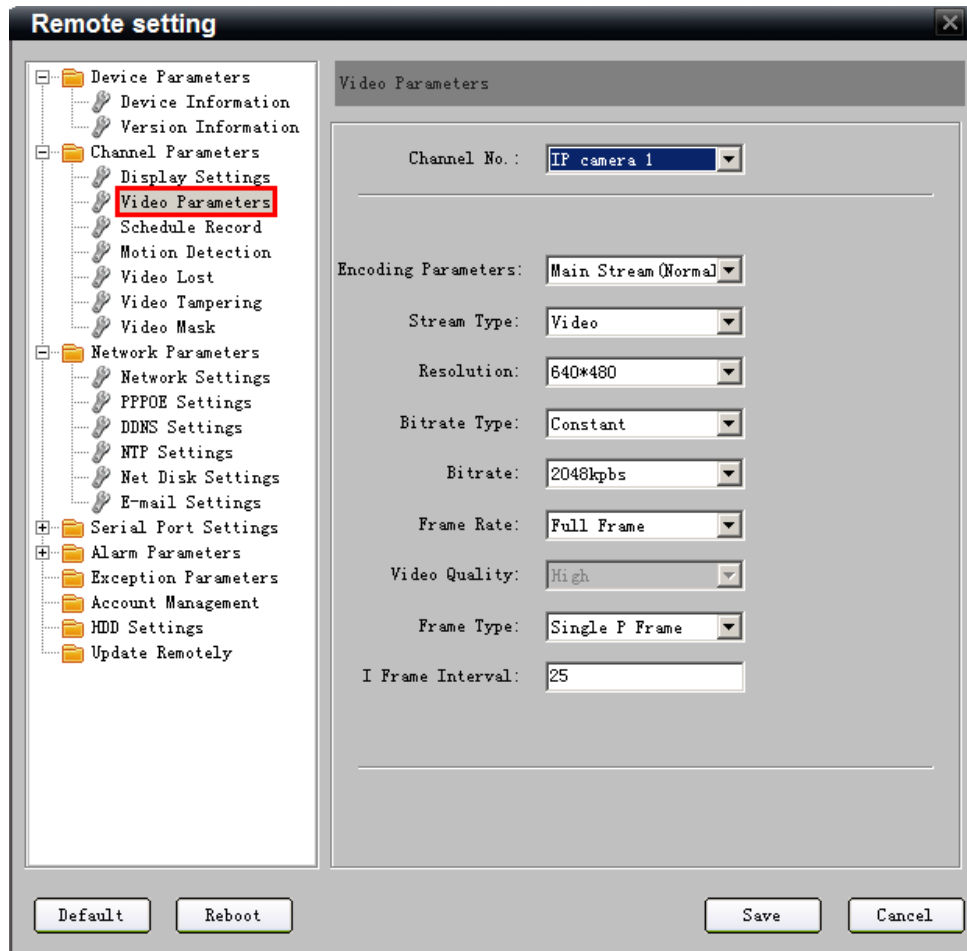


Figure 9.6

Settings for recording:

Items	Descriptions
Encoding Parameters	Main Stream (Normal/Event) and Sub stream.
Stream Type	Video and Video & Audio
Resolution	Recording Resolution
Bit rate Type	Variable and Constant
Frame Type	BBP,BP and Single P

9.3.2 Schedule Recording

Step1: Enable Schedule Recording.

Note: When NVR is succeed to connect to IP camera, it will start schedule recording which means recording for 7/24.

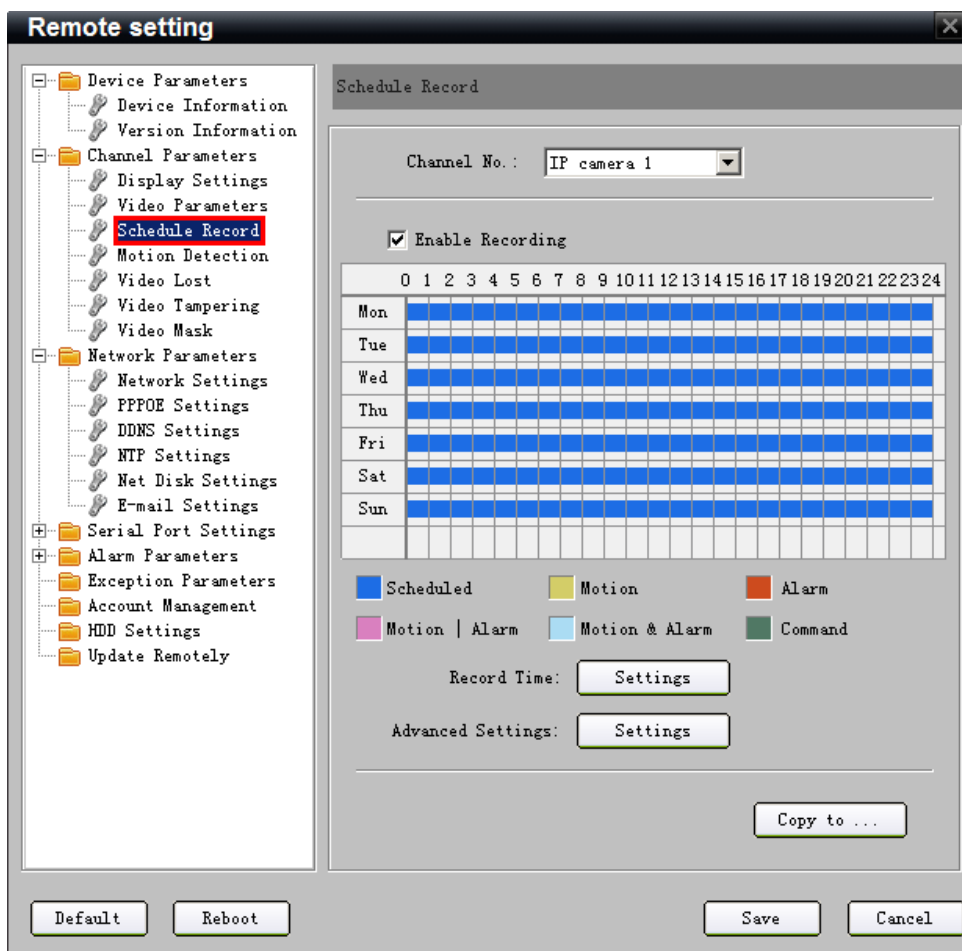


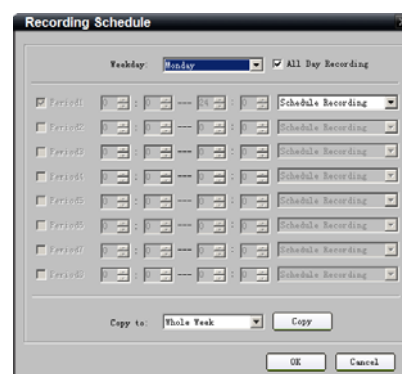
Figure 9.7

Step 2: Set recording time and type.

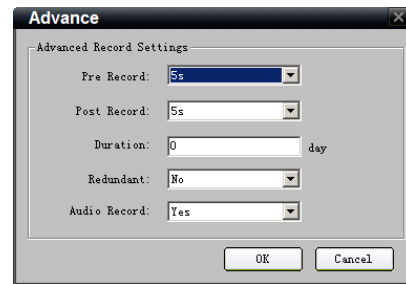
Click Settings button besides to “Record Time” to enter setup page.

Select one day in a week, and select All Day recording if necessary. You may also set period recording by disable All Day Recording; there are 8 time periods in one day. Then you can select schedule recording from the drop-down menu beside the periods. Then you may also select copy the settings to whole week or to one day.

Note: Please make sure that each time period is not overlapped.



In the “Advanced Record Settings”, you may configure parameters of Pre Record time, Post Record time, Recordings Duration, Redundant Recording and whether to record audio.



9.3.3 Motion Detection Recording

Go to Motion Detection page:

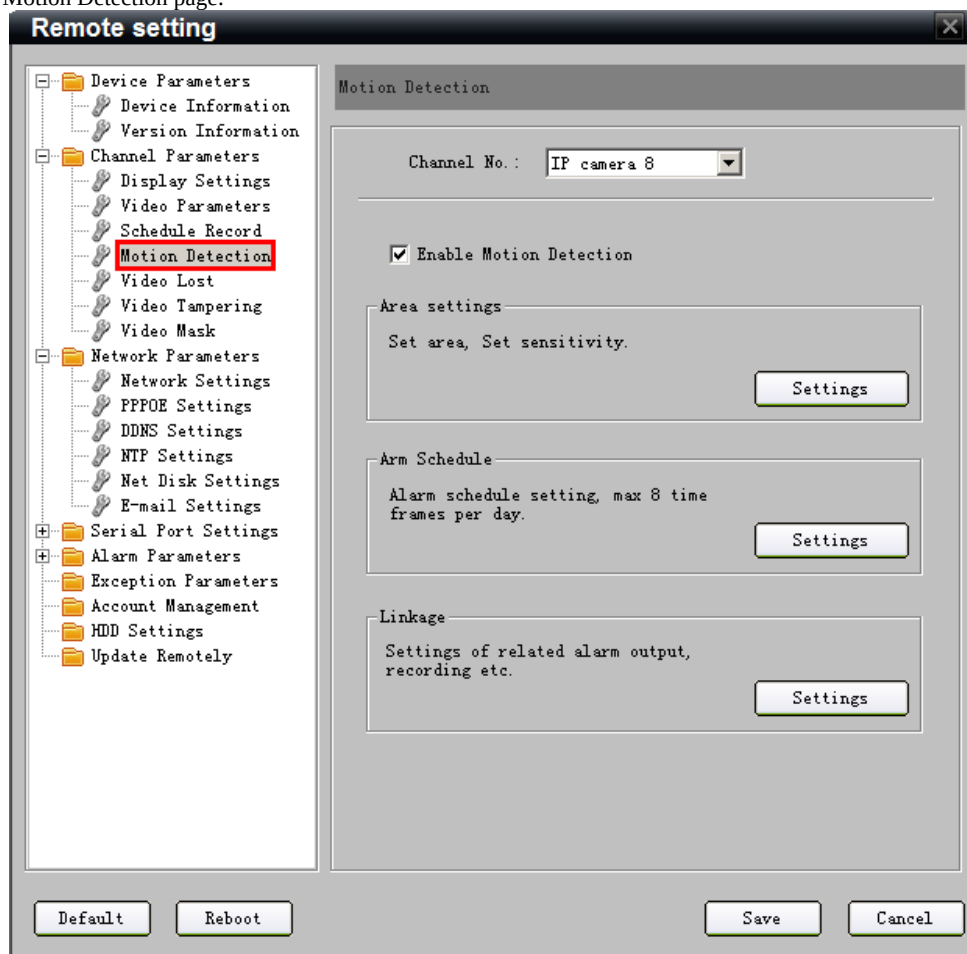


Figure 9.8

Note: If you are using IP camera that is not from Hikvision, please setup this function by using its own software.

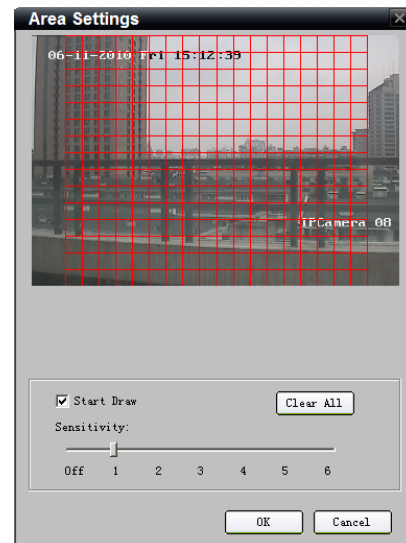
Step1: Select Channel No. for motion detection recording.

Step2: Enable motion detection by tick the box.

Step3: Then you can click settings buttons to set area, arm schedule and linkage.

Step4: Tick box of Start Draw and draw an area on the image by lift-pressing and holding the mouse. Double-click can select full screen.

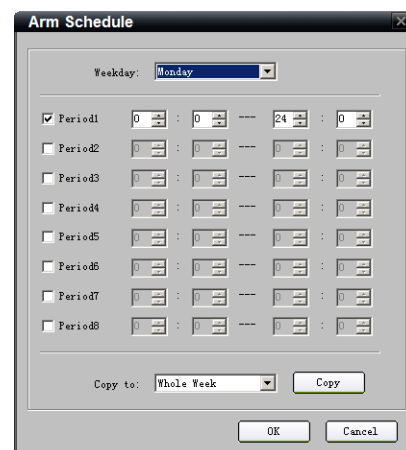
Step5: Select a sensitivity level for motion detection. Level 1 is the lowest, 6 is the highest.



Step6: Arm Schedule Setup

You may select one day in a week, or select several time periods in one day. Then you may also select copy the settings to whole week or to one day.

Note: There are 8 time periods in one day.

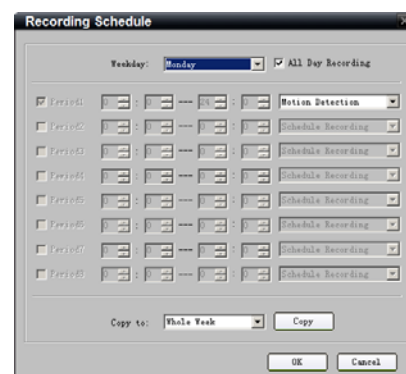


Step7: Go back to Schedule Record page and click settings button besides Record Time to enter Recording Schedule menu.

Step8: Select one day in a week, and select All Day recording if necessary. You may also set period recording by disable All Day Recording; there are 8 time periods in one day. Then you can select Motion Detection from the drop-down menu beside the periods. Then you may also select copy the settings to whole week or to one day.

Note:

- (1) Please make sure that each time period is not overlapped.
- (2) The valid time of motion detection recording is the intersection of arm schedule and recording schedule.

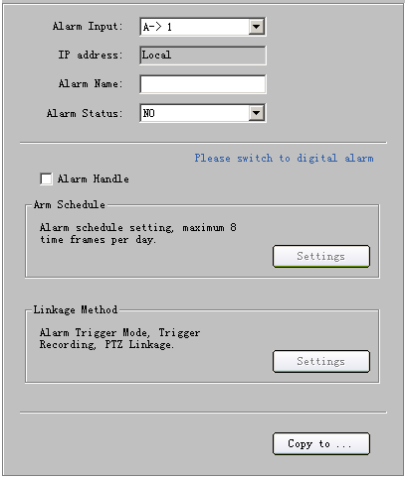


9.3.4 Alarm Recording

Select  Alarm Parameters → Alarm Input Settings

Step1: Select alarm input.

Note: It refers to the alarm input of IP channel.



Alarm Input: A-> 1
IP address: Local
Alarm Name:
Alarm Status: NO

Please switch to digital alarm

☐ Alarm Handle

Arm Schedule
Alarm schedule setting, maximum 8 time frames per day. [Settings](#)

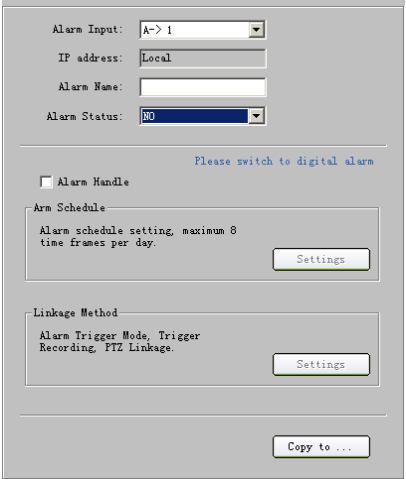
Linkage Method
Alarm Trigger Mode, Trigger Recording, PTZ Linkage. [Settings](#)

[Copy to ...](#)

Step2: Select the type of alarm input, “NO” or “NC”.

Note: “NO” is the default status. The settings will become effective after rebooting.

If you are using IP camera that is not from Hikvision, please setup this function by using its own software.



Alarm Input: A-> 1
IP address: Local
Alarm Name:
Alarm Status: NO

Please switch to digital alarm

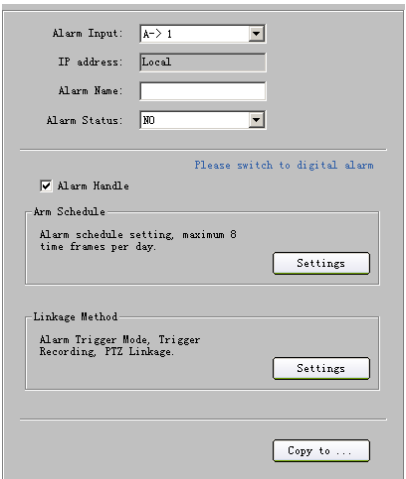
☐ Alarm Handle

Arm Schedule
Alarm schedule setting, maximum 8 time frames per day. [Settings](#)

Linkage Method
Alarm Trigger Mode, Trigger Recording, PTZ Linkage. [Settings](#)

[Copy to ...](#)

Step3: Enable “Alarm Handle” to activate “Arm Schedule” & “Linkage Method”.



Alarm Input: A-> 1
IP address: Local
Alarm Name:
Alarm Status: NO

Please switch to digital alarm

☒ Alarm Handle

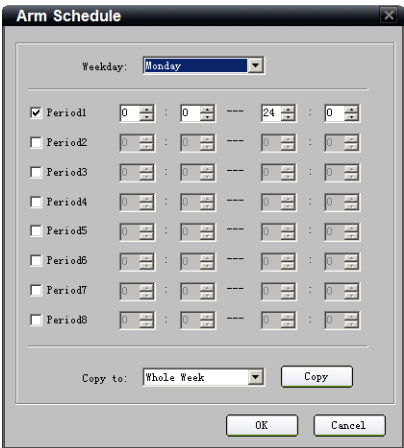
Arm Schedule
Alarm schedule setting, maximum 8 time frames per day. [Settings](#)

Linkage Method
Alarm Trigger Mode, Trigger Recording, PTZ Linkage. [Settings](#)

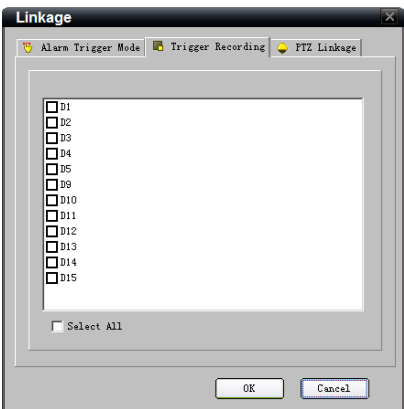
[Copy to ...](#)

Step4: Set the fortify time for alarm input.
Click “Settings” in “Fortify Time” menu. Select “Weekday” as some day of the week or the whole week for recording time. The “All Day Record” or 8 “Segments” can be selected as well.

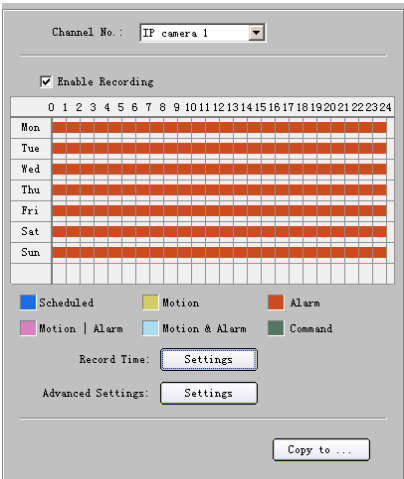
Note: The time of each segment can not be overlapped.



Step5: Set recording channel triggered by alarm.
Click “Settings” in “Linkage” menu and select “Trigger Recording” tab.
Enable the recording channels you want.



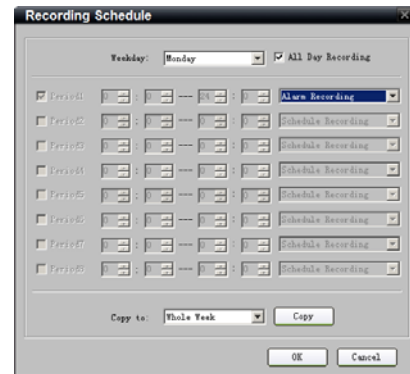
Step6: Enter schedule recording interface. Click ☒ **Enable Recording** to enable Recording.



Step7: Select one day in a week, and select All Day recording if necessary. You may also set period recording by disable All Day Recording; there are 8 time periods in one day. Then you can select Alarm Recording from the drop-down menu beside the periods. Then you may also select copy the settings to whole week or to one day.

Note:

- (1) Please make sure that each time period is not overlapped.
- (2) The valid time of alarm recording is the intersection of arm schedule and recording schedule.



9.3.5 Other Recording Modes

Other Recording Modes are including “Motion detection & Alarm”, “Motion detection | Alarm”.

“&” means recording is triggered when two situations happened together.

“|” means recording is triggered when one of the situations happened.

The configurations are the same with “Motion detection recording” or “Alarm recording”.

9.4 Alarm Settings

You can configure motion detection alarm, signal level alarm, video loss alarm and other alarm and linkage through web client.

9.4.1 Motion Detection Alarm

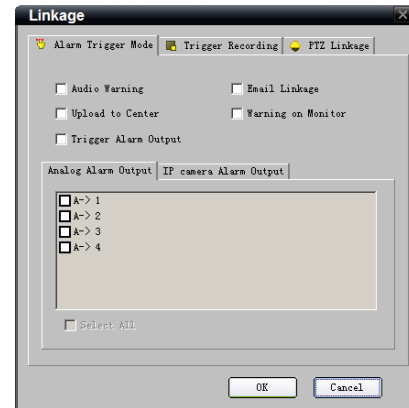
Step1: The same with the Step 1 of *Section 9.3.3 Motion Detection Recording*.

Step2: The same with the Step 2 of *Section 9.3.3 Motion Detection Recording*.

Step3: The same with the Step 3 of *Section 9.3.3 Motion Detection Recording*.

Step4: The same with the Step 4 of *Section 9.3.3 Motion Detection Recording*.

Step5: Set the alarm linkage for motion detection and select alarm output channel.



Alarm Linkages Description:

Linkage	Description
Warning on Monitor	When the alarm signal is detected, the image of corresponding channel will pop out as single screen.
Audio Warning	Alarm triggers buzzer
Upload to Center	Upload the alarm signal to the center, such as client software
E-mail Linkage	When the alarm signal is detected, the client software will send the email to the designated mailbox.
Trigger Alarm Output	Trigger alarm output of the device; if the device is 9000 series, triggering alarm output of IP channel can be selected as well.

9.4.2 Signal Level Alarm

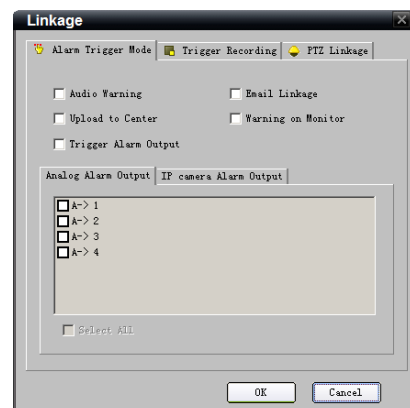
Step1: The same with the Step1 of *Section 9.3.4 Alarm Recording*.

Step2: The same with the Step2 of *Section 9.3.4 Alarm Recording*.

Step3: The same with the Step3 of *Section 9.3.4 Alarm Recording*.

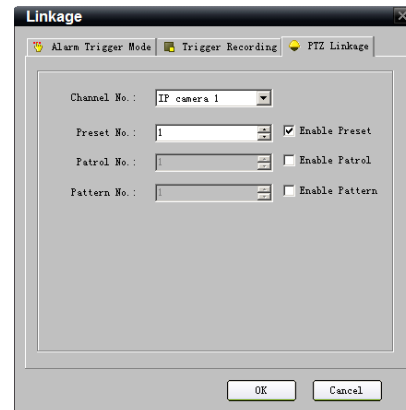
Step4: The same with the Step4 of *Section 9.3.4 Alarm Recording*.

Step5: Set the alarm linkage for signal level and select alarm output channel.



Step6: Set PTZ linkage for signal level alarm.

Note: Alarm input can link PTZ of several channels, but one channel can only link one option of preset, sequence and pattern.

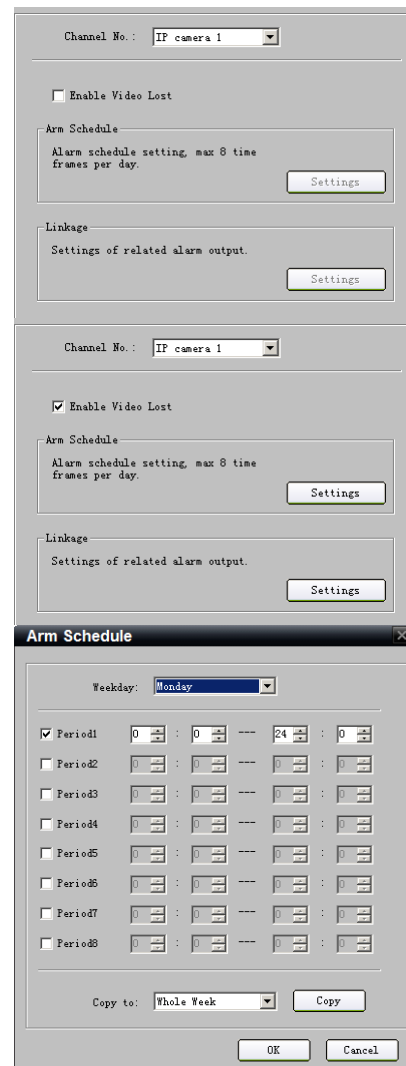


9.4.3 Video Loss

Note: This function is only available on IP cameras from Hikvision.

Step1: Select the channel number for video loss.
Select Channel Parameters → Video Lost

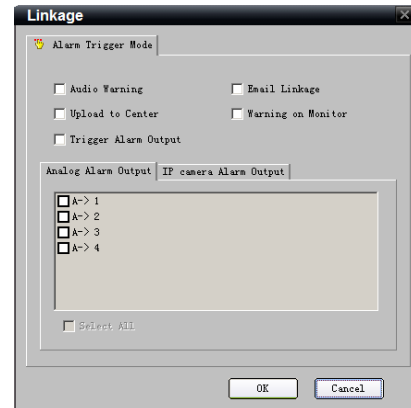
Step2: Enable “Video Loss” to activate settings of “Fortify Time” and “Linkage”



Step3: Set the fortify time for video loss.
Click “Settings” in “Fortify Time” menu.
Select “Weekday” as some day of the week or the whole week for the fortify time.
The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment can not be overlapped.

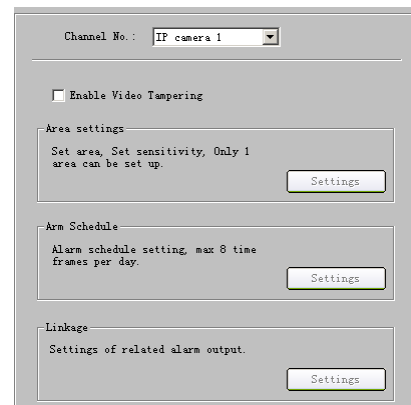
Step4: Set linkage for video loss.
Click “Settings” in the “Linkage” menu.



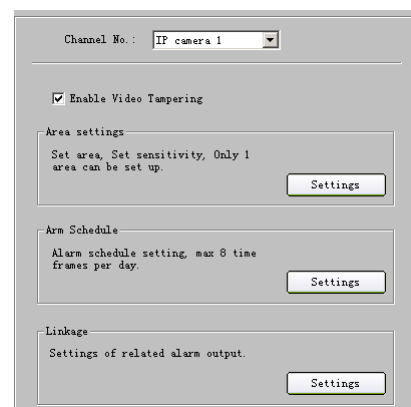
9.4.4 Video Tampering

Note: This function is only available on IP cameras from Hikvision.

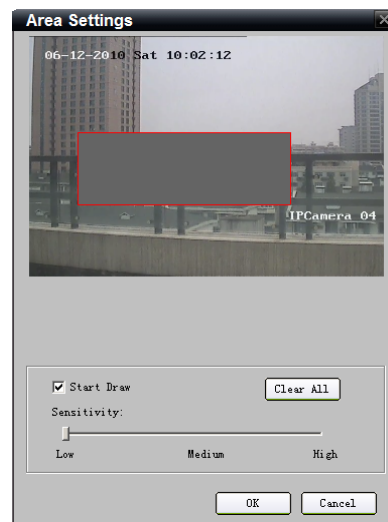
Step1: Select the channel number for video tampering.
Select  Channel Parameters →  **Video Tampering**



Step2: Enable “Video Tampering Alarm” to activate settings of “Area Settings”, “Arm Schedule” and “Linkage”.

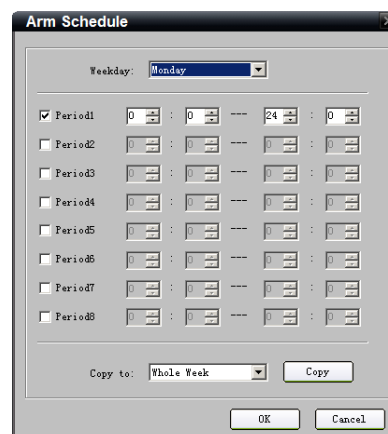


Step3: Set the video tampering area and sensitivity.
The sensitivity can be divided into three levels: Low, Medium, and High.
Enable “Start Draw”, and select the detection area by using mouse.

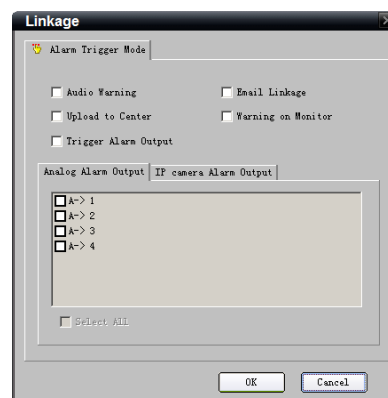


Step4: Set the fortify time for video tampering.
Click “Settings” in “Arm Schedule” menu.
Select “Weekday” as some day of the week or the whole week for the arm schedule.
The “All Day Record” or 8 “Periods” can be selected as well.

Note: The time of each segment can not be overlapped.



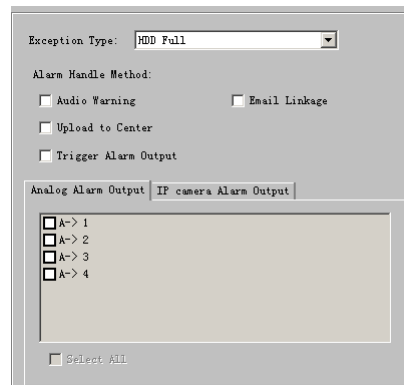
Step5: Set linkage for video tampering.
Click “Settings” in the “Linkage” menu.



9.4.5 Exceptions

Exception parameters are for the alarm handle of abnormal event, which is including “HDD Full”, “HDD Fault” (HDD errors or HDD not initialization), “Network Broken”, “IP Address Conflict”, “Illegal Access” (user name or password wrong), “Video Output Standard Mismatch” and “Video Signal Exception” (video signal unstable).

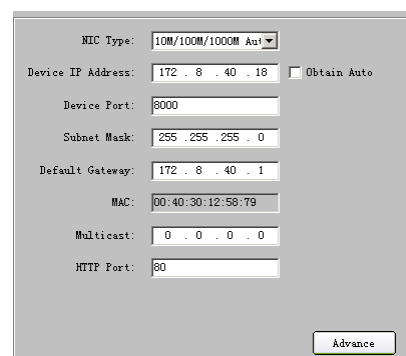
Select the exception type and handle method.
Select  **Exception Parameters** to enter configuration interface.



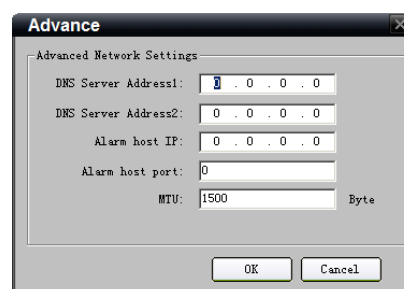
9.5 Network Configuration

9.5.1 Basic Configuration

Select  **Network Parameters** →  **Network Settings**
Configure the network according to the actual situation. If there is DHCP server in the network, enable “Obtain Auto” and reboot the device to get the IP address under this network segment automatically.



Select “Advance” to enter advanced configuration. You can configure preferred DNS server1 and spare DNS server2, IP address of alarm host and IP server.



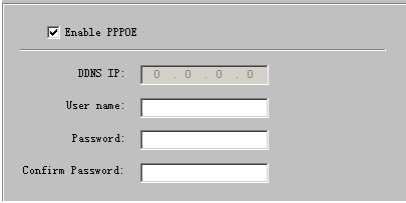
Parameters	Description
DNS1 DNS2	Preferred and spare DNS server
Alarm host	Alarm signal can be uploaded to the IP address automatically
IP sever	IP address of IP server

9.5.2 PPPoE Settings

Select  Network Parameters →  PPPoE Settings

Enable PPPoE by ticking ☒, input the user name and password, then save the changes and reboot the device to make the parameters become effective.

If succeed to dial, the current IP address will be displayed in the blank “DDNS IP”.



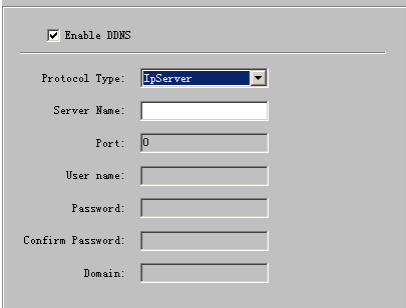
9.5.3 DDNS Settings

Adopting DDNS function can solve the problems caused by dynamic IP.

Click  Network Parameters →  DDNS Settings

Enable DDNS.

If the “IP Server IP” is selected as protocol, then input the address where the IP server is running.

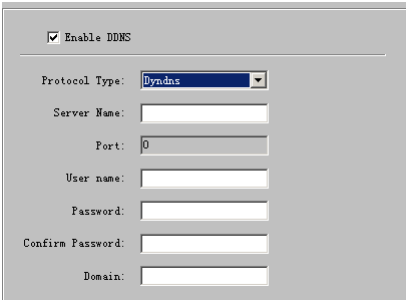


If the “DynDNS” is selected as protocol:

Server Name: Input the IP address of the server, such as members.dyndns.org;

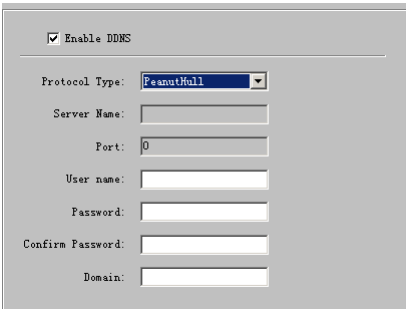
Domain: the domain name that user applied for the device, such as test.dynlia.com;

User name, password and verify: the account information that user registered on the DynDNS website.



If the “Peanut Hull” is selected as protocol:

Input the user name and password applied on the Peanut Hull website to visit the device by the applied domain name.



9.5.4 NTP Settings

Adopting NTP function can enable client software to synchronize the time and data of the device regularly.

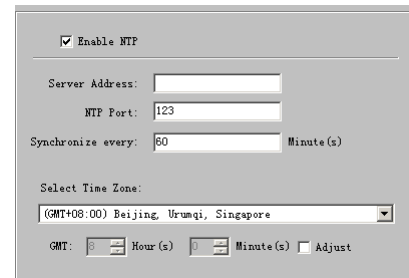
Select Network Parameters → **NTP Settings**

Tick ☒ to enable NTP function.

Note: Time Synchronization Interval: 0~10080 min (default 60min).

If the device connected to the public network, the IP address of NTP server provided by carrier can be input in the blank “Server Address”;

If the device connected to private network, the IP address of NTP server built by NTP software can be input the blank “Server Address”.



The NTP Settings interface includes the following fields:

- ☒ Enable NTP
- Server Address:
- NTP Port:
- Synchronize every: Minute(s)
- Select Time Zone:
- GMT: Hour(s) Minute(s) ☐ Adjust

9.5.5 Net Disk Settings

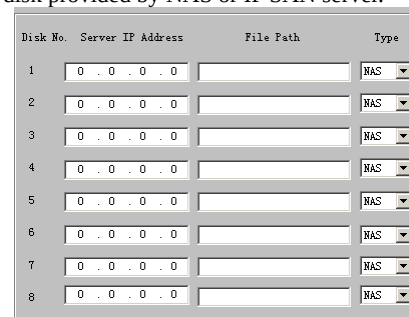
By Net Disk Settings, recorded data can be saved to the network storage disk provided by NAS or IP SAN server.

Select Network Parameters → **NFS Settings**

Input the IP address of NAS or IP SAN server in the blank “Server IP address”; input the saving path allocated by NAS or IP SAN server in the blank “File Path”.

Note:

1. Make sure that the device supports NFS function and NAS or IP SAN server allocated the storage space correctly.
2. Up to 1 IP SAN server is allowable to be used.



Disk No.	Server IP Address	File Path	Type
1	0 . 0 . 0 . 0		NAS
2	0 . 0 . 0 . 0		NAS
3	0 . 0 . 0 . 0		NAS
4	0 . 0 . 0 . 0		NAS
5	0 . 0 . 0 . 0		NAS
6	0 . 0 . 0 . 0		NAS
7	0 . 0 . 0 . 0		NAS
8	0 . 0 . 0 . 0		NAS

9.5.6 E-Mail Settings

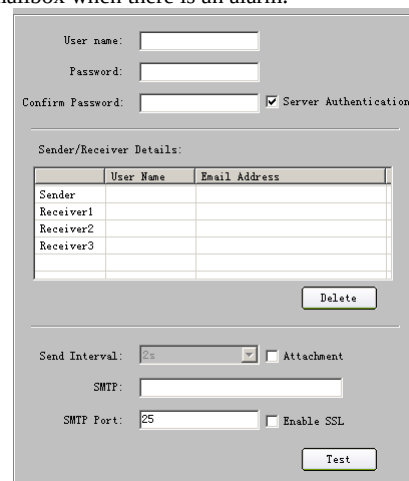
Through E-mail configuration, the e-mail can be sent to the designated mailbox when there is an alarm.

Select Network Parameters → **E-mail Settings**

If server authentication is needed, enable it (i.e. ☒) and input user name and password.

Input the sender and recipient information, if it needs to send picture, you can enable “Attachment” (i.e. ☒)

Note: Currently the function of captured picture attachment is invalid for DS-9500 NI-S.



The E-mail Settings interface includes the following fields:

- User name:
- Password:
- Confirm Password: ☒ Server Authentication
- Sender/Receiver Details:

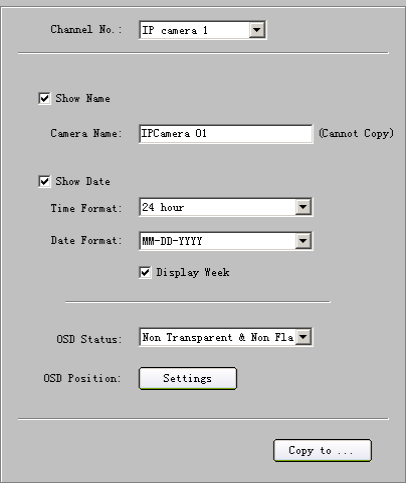
	User Name	Email Address
Sender		
Receiver1		
Receiver2		
Receiver3		
- Send Interval: ☐ Attachment
- SMTP:
- SMTP Port: ☐ Enable SSL
-

9.6 Channel Configuration

9.6.1 Channel Display Settings

Note: This function is only available on IP cameras from Hikvision.

Select  Channel Parameters →  **Display Settings**
You can configure channel name, OSD and related parameters here.



Channel No.: IP camera 1

☒ Show Name
Camera Name: IPCamera 01 (Cannot Copy)

☒ Show Date
Time Format: 24 hour
Date Format: MM-DD-YYYY
☒ Display Week

OSD Status: Non Transparent & Non Fla

OSD Position: Settings

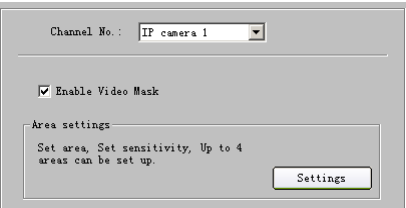
Copy to ...

9.6.2 Video Mask

Note: This function is only available on IP cameras from Hikvision.

Step1: Select channel number, and enable video mask (i.e. .

Select  Channel Parameters →  Video Mask



Channel No.: IP camera 1

☒ Enable Video Mask

Area settings
Set area, Set sensitivity, Up to 4 areas can be set up.

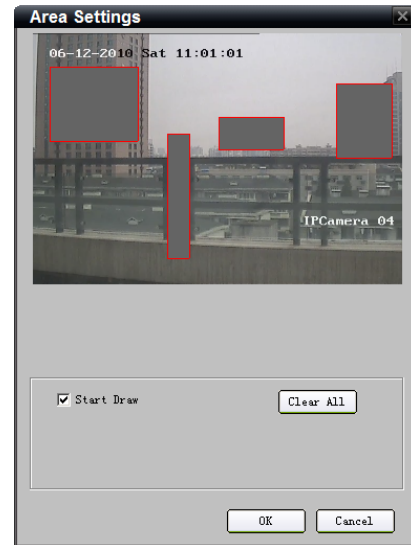
Settings

Step2: Set the mask area.

Click “Settings” to enter area set menu.

Enable “Start Draw” (i.e. ☒), select the mask area by clicking and dragging the mouse.

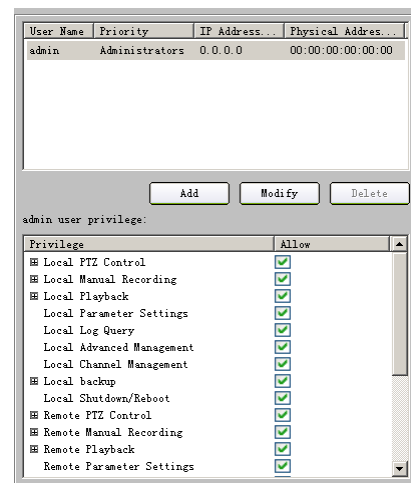
Note: Max. 4 areas can be configured in one image.



9.7 Account Management

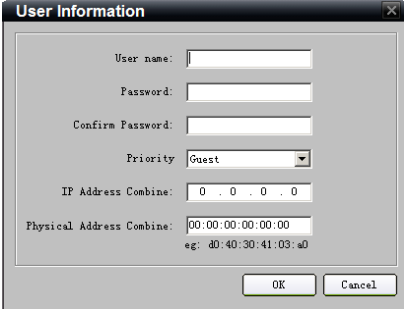
The default user name and password of device administrator are “admin” and “12345”. Administrator can remote add, delete users or distribute authority for users. The new added users are divided into two levels: user and operator. (For “Remote Configuration” privilege, operator has “Voice Talk” right, user does not; for “Channel Configuration” privilege, operator has all the rights, user has local playback, remote playback rights.)

Select  Account Management



Click “Add” to add user.

Note: If you set the IP address or physical address, and then only the PC with the same IP address or physical address can visit the device through network.

A dialog box titled "User Information" with a close button (X) in the top right corner. It contains several input fields: "User name:" with a text box, "Password:" with a text box, "Confirm Password:" with a text box, "Priority:" with a dropdown menu showing "Guest", "IP Address Combine:" with a text box containing "0 . 0 . 0 . 0", and "Physical Address Combine:" with a text box containing "00:00:00:00:00:00" and a hint "eg: d0:40:30:41:03:a0". At the bottom right are "OK" and "Cancel" buttons.

Note:

Local PTZ Control: Locally control PTZ cameras.

Local Manual Record: Locally start and stop manual recording on any of the channels.

Local Playback: Locally play recorded files that are on the NVR.

Local Parameters Settings: Configure the settings, restore to default settings, import/export configuration file.

Local Log Query: Search and view logs of NVR.

Local Advanced Operation: HDD management (including the initialization and changing the properties of a disk). Ability to update system firmware as well as to stop the relay output.

Local Camera Management: Enable and disable analog channels. Ability to add and delete IP cameras.

Local Backup: Locally backup recorded files from any of the channels.

Local Shutdown/Reboot: Shutdown or reboot the NVR.

Remote PTZ Control: Remotely control PTZ cameras.

Remote Manual Record: Remotely start and stop manual recording on any of the channels.

Remote Playback: Remotely play and download recorded files that are on the NVR.

Remote Configuration: Remotely configure parameters, restore parameters to factory defaults and import settings to as well as export settings from NVR.

Remote Log Search: Remotely view logs that are saved on the NVR.

Remote Advanced Operation: Remotely manage hard disk drives (initializing and setting properties for HDDs). Ability to remote update system firmware and stop of the relay output.

Voice Talking: Ability to use two-way radio between the remote client and the NVR.

Remote preview: Select and view live video over the network.

Remote Alarm Control: Remote alert or control the relay output of the NVR. Alarm and exception settings must be configured properly to upload to host.

Remote Video Output Control: Send remote button control signal.

Remote Serial Port Control: Configure settings for RS232 and RS485 ports.

Remote Camera Management: Remotely enable and disable analog channels. Add and delete IP cameras.

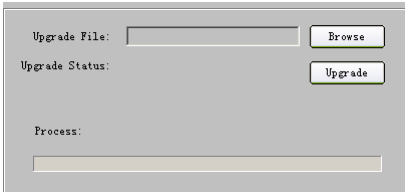
Remote Shutdown/Reboot: Remotely shutdown or reboot the NVR.

9.8 Remote Upgrade

Remote Upgrade:

Click  **Update Remotely**

Click “Browse” to search the local upgrade file, click “Upgrade” to start upgrade remotely.

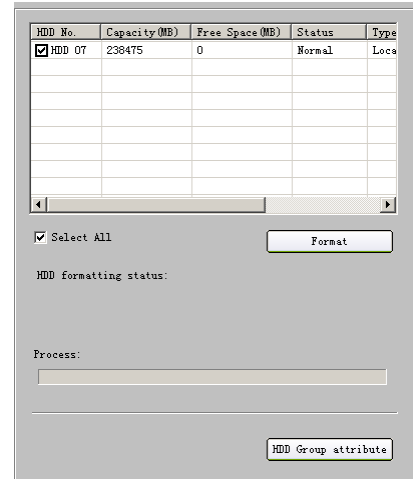
A dialog box for remote upgrade. It has a label "Upgrade File:" followed by a text box and a "Browse" button. Below that is a label "Upgrade Status:" followed by a text box and an "Upgrade" button. At the bottom is a label "Process:" followed by a progress bar.

9.9 HDD Settings

HDD Formatting:

Click  HDD Format

Note: Please backup the data before formatting hard disk.



HDD No.	Capacity (MB)	Free Space (MB)	Status	Type
☒ HDD 07	238475	0	Normal	Local

☒ Select All Format

HDD formatting status:

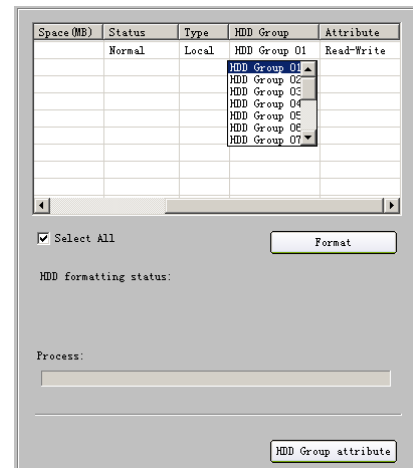
Process:

HDD Group attribute

Disk Group Management:

Select one disk and select one HDD Group you want it to be shown as figure right.

Note: NVR supports up to 16 HDD Groups.



Space (MB)	Status	Type	HDD Group	Attribute
	Normal	Local	HDD Group 01	Read-Write

☒ Select All Format

HDD formatting status:

Process:

HDD Group attribute

HDD Property Settings:

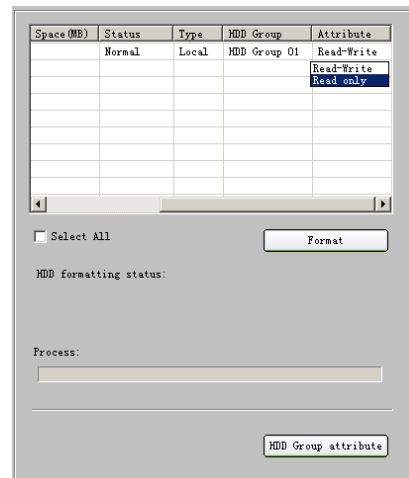
Select one disk, and configure its property by selecting Read-Write, Read-Only or redundant from drop-down menu, shown as figure right.

Note:

Read-Write: Writing in or Read from this disk is allowed when selecting this option.

Write-Only: Unable to write in this disk to protect existed recordings from being overwritten when selecting this option.

Redundant: Redundant recording in this disk is allowed when selecting this option.



Space (MB)	Status	Type	HDD Group	Attribute
	Normal	Local	HDD Group 01	Read-Write

☐ Select All Format

HDD formatting status:

Process:

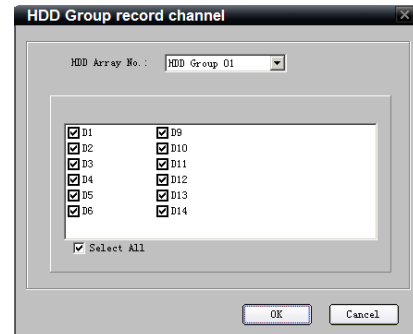
HDD Group attribute

HDD Group record channel:

Click “HDD Group attribute” button to enter setup page.

First select a HDD group and then tick channels you want to record in this HDD group, and then click OK to finish

Note: Recording the images of one channel in one HDD group is recommended.



C H A P T E R 10

Appendix

Glossary

DHCP

Dynamic Host Configuration Protocol (DHCP) is a network application protocol used by devices (DHCP clients) to obtain configuration information for operation in an Internet Protocol network.

NTP

Acronym for Network Time Protocol. A protocol designed to synchronize the clocks of computers over a network.

PPPoE

PPPoE, Point-to-Point Protocol over Ethernet, is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modem) over Ethernet and in plain Metro Ethernet networks.

DDNS

Dynamic DNS is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a domain name server to change, in real time (ad-hoc) the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

MTU

Maximum Transmission Unit. Unit is represented by bytes. MTU of most network devices is 1500. If it's bigger than gateway MTU, the data packets will be split into smaller ones for transmission. In this case, there will be pieces of data packet causing packet loss ratio to raise and slow down network speed. When MTU is preset smaller than the gateway MTU, the packet loss ratio will decrease.

NVR

Acronym for Network Video Recorder. An NVR can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other DVRs.

FAQ

- **Why does my NVR make a beeping sound after booting?**

There are a few reasons for the warning beep your NVR makes after booting.

1. There is no HDD present in the NVR.
2. The HDD has not been initialized.
3. The HDD is defective.

If you wish to use your NVR without any HDDs, you may disable this warning beep in the Exception Settings menu (See *Exceptions*).

- **Why is there no video recorded after setting the motion detection?**

If there are no recorded video after setting the motion detection, please check:

1. Check that the recording schedule is setup correctly by following the steps listed in *Schedule Recording*.
2. Check that the motion detection area is configured correctly (See *Motion Detection*).
3. Make sure that channels are being triggered for motion detection (See *Motion Detection*).

- **Why doesn't the NVR detect my USB export device for exporting recorded files?**

There's a chance that the NVR and your USB device is not compatible. Please refer to our company's website to view a list of compatible devices.